

ifm electronic



Operating instructions
AS-i CompactLine module

ecomat300®

UK

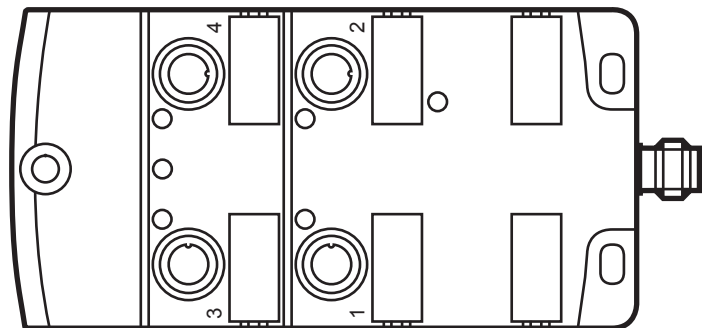
AC2464

AC2465

AC2467

AC2468

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1 Preliminary note

► Instruction

> Reaction, result



Important note

Non-compliance can result in malfunction or interference.



Information

Supplementary note.

2 Safety instructions

UK

- Please read the operating instructions prior to set-up of the device. Ensure that the product is suitable for your application without any restrictions.
- The unit conforms to the relevant regulations and EC directives.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application.
- Installation, electrical connection, set-up, operation and maintenance of the unit must only be carried out by qualified personnel authorised by the machine operator.

3 Functions and features

AC2464 / AC2465

- maximum number of modules per master: 31
- AS-interface version 2.1

AC2467 / AC2468

- maximum number of modules per master: 62
- AS-interface version 3.0

4 Installation



- ▶ Disconnect the system from power before installation.



- ▶ For installation choose a flat mounting surface.
The entire bottom of the module must lie flat on the mounting surface.

- ▶ Fix the module onto the mounting surface using M4 screws and washers (1).
Tightening torque 1.8 Nm.
Use stainless steel sleeve (E70402)* for installation in case of high mechanical stress.
- ▶ Connect the plugs of the sensors (2) to the M12 sockets.
Tightening torque max. 1 Nm.
- ▶ Cover the unused sockets with protective caps (E73004)*.
Tightening torque 0.6...0.8 Nm.
- ▶ The flat cable end seal (E70413)* must be used if the module is at the end of the cable line.

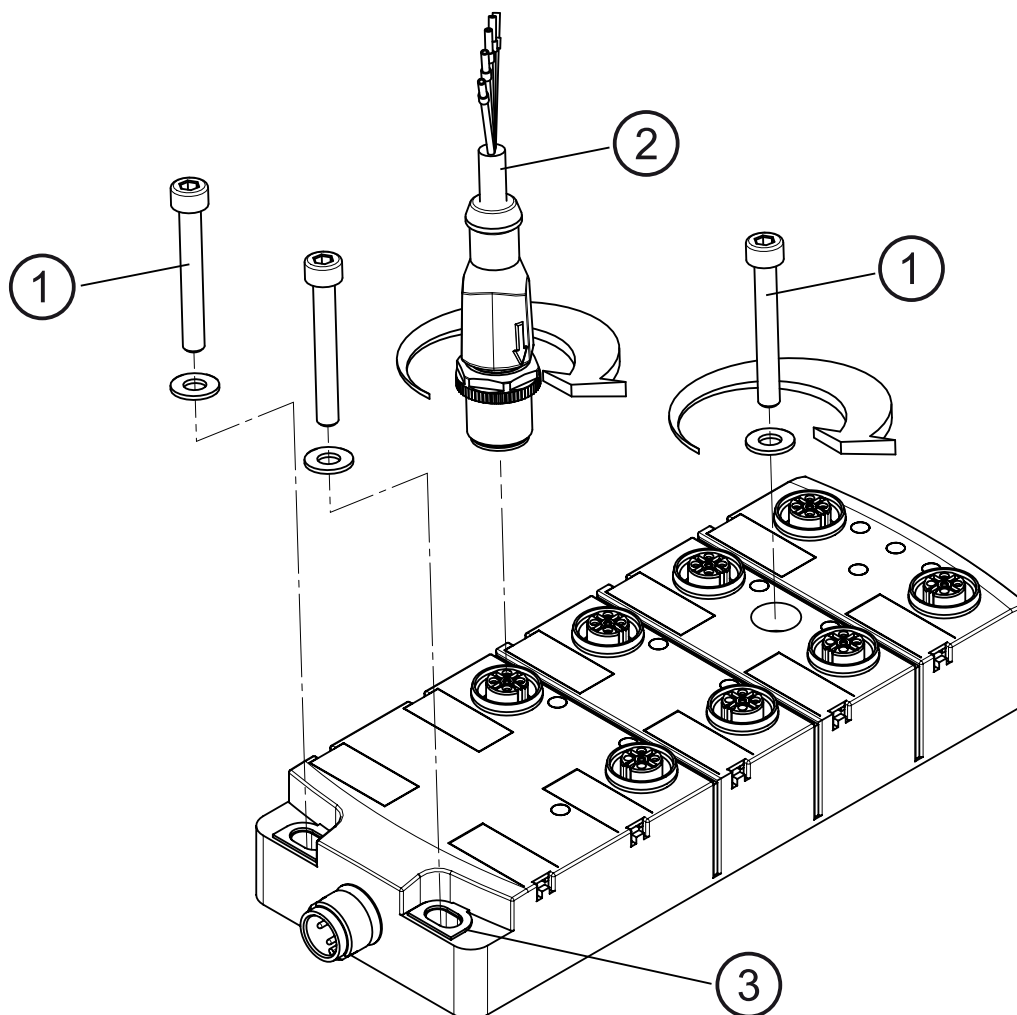
*to be ordered separately



In case of interference coupling to the sensor cables or the black flat cable (24 V DC auxiliary supply) the use of the functional earth springs can improve the EMC.

Requirement: An interference-free and low-resistance connection to the machine ground.

- ▶ If necessary, you can ground the module via the functional earth springs (3).



- 1: M4 screws and washers (not supplied with the device). Tightening torque 1.8 Nm.
2: M12 connector. Tightening torque max. 1 Nm.



Observe the maximum tightening torque of the connection cable.

5 Electrical connection



The unit must be connected by a qualified electrician.

The national and international regulations for the installation of electrical equipment must be adhered to.



Intended for connection to class 2 (cULus class 2) circuits only.

► Disconnect power.

► Connect the unit.

5.1 External protective circuitry for inductive loads

The switch-on and switch-off capacity for triggering solenoids is rated up to 20 W (IEC 60947-5-1, utilisation category DC-13).



Recommendation: For inductive loads use a free wheel diode on the load.
ifm electronic offers valve plugs with integrated free wheel diodes.

6 Addressing

AC2464 / AC2465

► Assign a free address between 1 and 31.

The address is set to 0 at the factory.

AC2467 / AC2468

► Assign a free address between 1A and 31B.

The address is set to 0 at the factory.

7 Pin connection / data bits

inputs

1: sensor supply +
2+4: data input
3: sensor supply -
5: functional earth



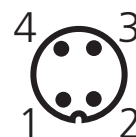
outputs

3: external voltage AUX -
4: switching output
5: functional earth (FE)
1,2: not connected (n.c.)

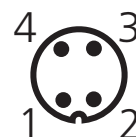


connector M12 AC2464 / AC2468

1: AS-i +
3: AS-i -

**connector M12 AC2465 / AC2467**

1: AS-i +
2: AUX -
3: AS-i -
4: AUX +

**AC2464**

4 inputs

AS-i profile S-0.0.E / extended addressing mode: no

Data bit	D0	D1	D2	D3
Input	1	2	3	4
Socket	I-1	I-2	I-3	I-4
Pin	2+4	2+4	2+4	2+4

AC2465

4 inputs / 4 outputs

AS-i profile S-7.0.E / extended addressing mode: no

Data bit	D0	D1	D2	D3
Input	1	2	3	4
Socket	I-1	I-2	I-3	I-4
Pin	2+4	2+4	2+4	2+4
Output	1	2	3	4
Socket	O-1	O-2	O-3	O-4
Pin	4	4	4	4

AC2467

4 inputs / 4 outputs

AS-i profile S-7.A.7 / extended addressing mode: yes

Data bit	D0		D1		D2	D3	
Input	I1		I2		I-3	I-4	
Socket	I-1/2		I-1/2	I-2	I-3/4	I-3/4	I-4
Pin	4		2	4	4	2	4
Output	O1		O2		O3	O4	
Socket	O-1		O-2		O-3	O-4	
Pin	4		4		4	4	

Inputs Y-circuit	Outputs
Inputs 1: sensor supply + 2: data input 3: sensor supply + 4: data input 5: functional earth (FE)	Outputs 3: external voltage AUX - 4: switching output 5: functional earth (FE) 1.2: not connected (n.c.)

AC2468

4 inputs / AS-i profile S-0.A.E / extended addressing mode: yes

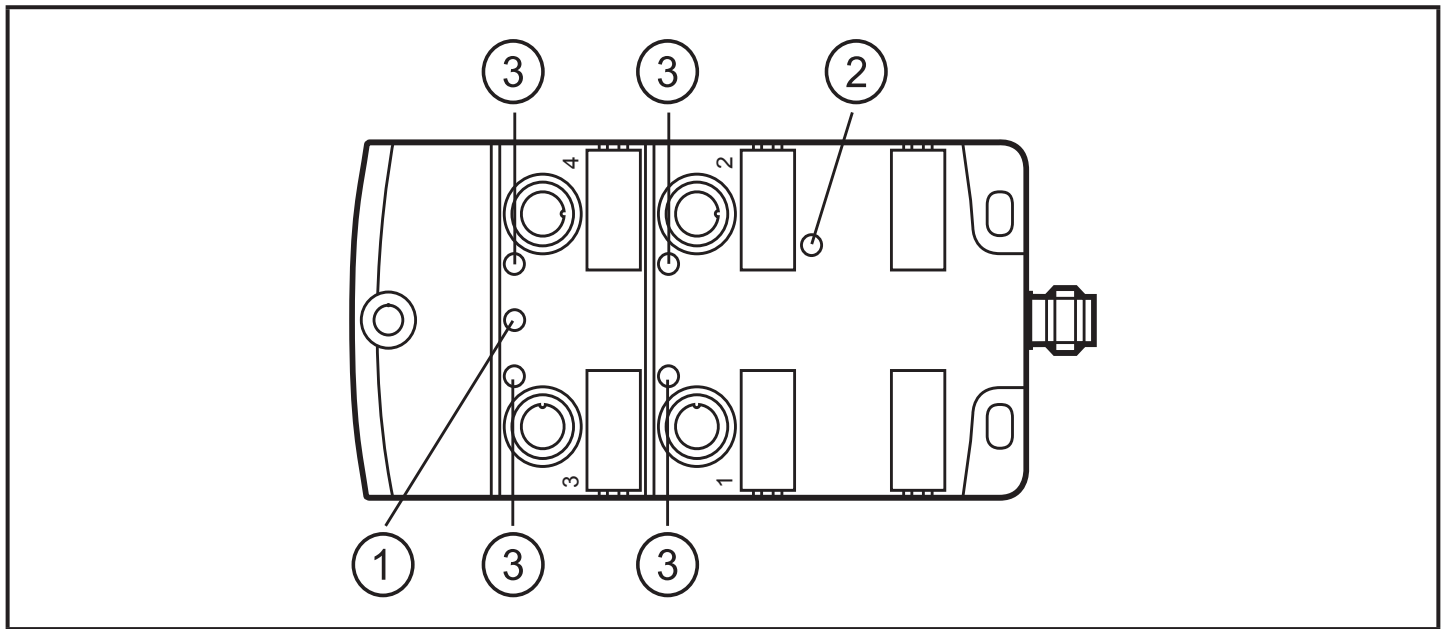
Data bit	D0		D1		D2	D3	
Input	I1		I2		I3	I4	
Socket	I-1/2		I-1/2	I-2	I-3/4	I-3/4	I-4
Pin	4		2	4	4	2	4

Inputs Y-circuit

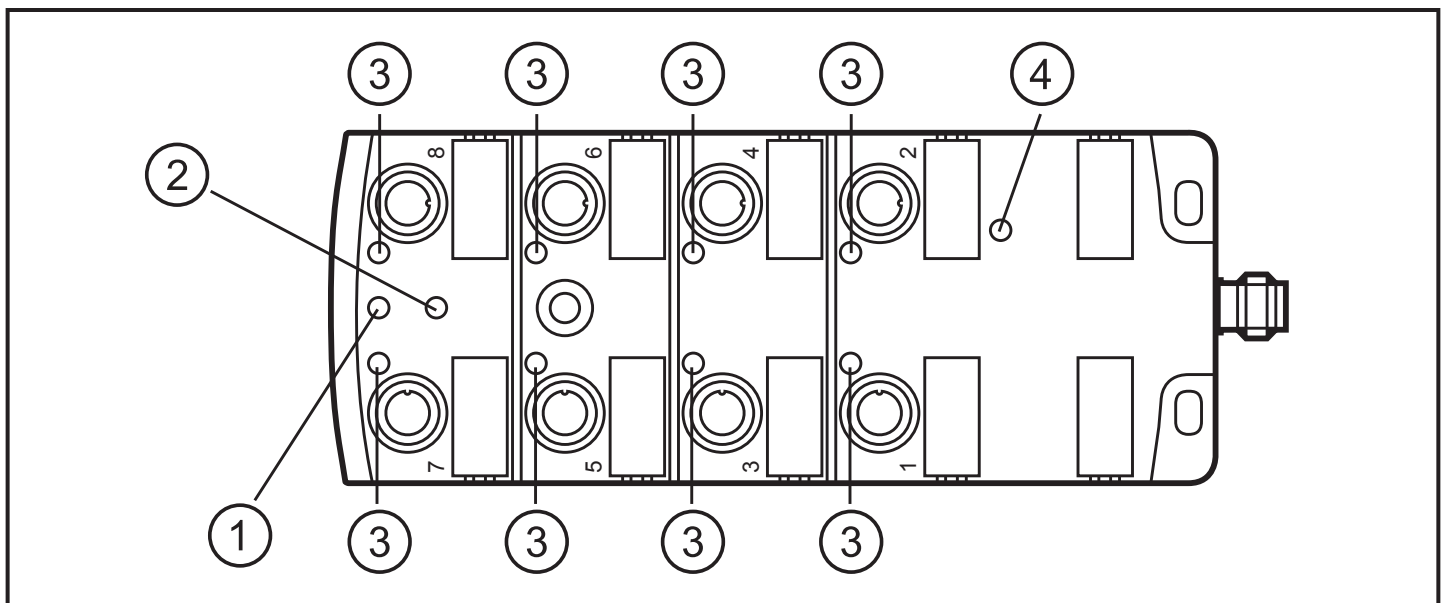
Inputs
1: sensor supply +
2: data input
3: sensor supply +
4: data input
5: functional earth (FE)

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8 Operating and display elements



- 1: LED AS-i
- 2: LED FAULT
- 3: LED IN/OUT



- 1: LED AS-i
- 2: LED AUX
- 3: LED IN/OUT
- 4: LED FAULT

LED AS-i green lights:

AS-i voltage supply ok

LED AUX green lights:

AUX voltage supply ok (AC2465 / AC2467)

LED IN/OUT lights:

input / output switched

LED FAULT red lights:

AS-i communication error, slave does not participate in the "normal" exchange of data, e.g. slave address 0

LED FAULT red flashes:

peripheral fault, e.g. sensor supply / output overloaded or shorted, communication active



Overload and short circuit of the input supply and the outputs are signalled as peripheral fault to the AS-i master (version 2.1 or higher).

9 Maintenance, repair and disposal

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The operation of the unit is maintenance-free.

After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.

10 Technical data

Technical data and further information at

www.ifm.com → Select your country → Data sheet direct

11 Scale drawing

AC2464 / AC2468

